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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/269,754	04/07/1999	JUHA PYRHONEN	P8306-9004	1554

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11/05/2002

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EXAMINER

LAM, THANH

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 11/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/269,754

Applicant(s)
Lappeenranta

Examiner
Thanh Lam

Art Unit
2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on CPA filed 10/9/2002.

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-12 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

6) ☐ Other:

Art Unit: 2834

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozaki (JP352062604A) in view of Sato (JP404138056A).

Ozaki discloses an electric machine construction, comprising: a stator space defined by a shell (1) and end portions (the portion of the frame 4 where the outlet air as indicated in arrow intend outwardly) at both ends of the shell, a stator (2) and a rotor (3) having a first end and a second end disposed within said stator space, comprising at least one cooling medium inlet opening (6) in the shell and, a suction means (5) at the vicinity of both end portions of the stator space for providing suction for drawing cooling medium into said stator space, wherein said suction means are fans arranged at an interior side of the end portions of the stator space including rotor bearings, in which an outlet channel (7) of said fans extends through the end portions, said end portions being disposed in a plane perpendicular (4) to an axis of the rotor, and wherein the arrangement is such that the cooling medium is drawn by the suction into the stator space through said at least one inlet opening and that the cooling medium is removed at the vicinity of both portions of the stator space. However, Ozaki does not teach the inlet opening positioned intermediate between the ends of the rotors.

Sato discloses (fig. 1 and 4) an inlet opening (inlet arrow of fig. 4) positioned at intermediated of the stator for the purpose of evenly distributing inlet air in the stator space.

Art Unit: 2834

It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange the position of the inlet opening in the shell as taught by Ozaki to the intermediated position (taught by Sato) between the rotor ends (taught by ozaki) to improve the inlet air evenly distributing in the stator space.

Regarding claim 8, the method claimed language is counter part of the apparatus claimed language. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to develop a particular method for the disclosed apparatus of Ozaki in view of Sato.

Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozaki in view of Sato, as apply to claim 1 and 8 above, and further in view of Sheerin.

Ozaki and Sato disclose all the aspect of claimed invention except for a heat exchanger.

Sheerin discloses a heat exchanger (24) provided within a space (108) between the outer surface of a shell (20) and the outer housing (40) for the purpose of cooling.

It would have been obvious to one of ordinary skill in the art at the time the invention was made utilize the combination structure of the machine as taught by Ozaki and Sato and modify the heat exchanger structure of Sheerin to adapt the stator shell of Ozaki to give an electric machine an improvement in cooling and prevent overheat of the machine.

Regarding claim 12, the method claimed language is counter part of the apparatus claimed language. Therefore, It would have been obvious to one of ordinary skill in the art at the

Art Unit: 2834

time the invention was made to develop a particular method for the disclosed apparatus of Ozaki and Sato in view of Sheerin.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

A handwritten signature in black ink, appearing to read 'Thanh Lam', with a stylized flourish at the end.

Thanh Lam

Nov. 2, 2002